PERMIT APPLICATION: NRS 04.024

APPLICANT: Tennessee Wildlife Resources Agency
200 Lowell Thomas Drive
Jackson, Tennessee 38301
731-423-5725

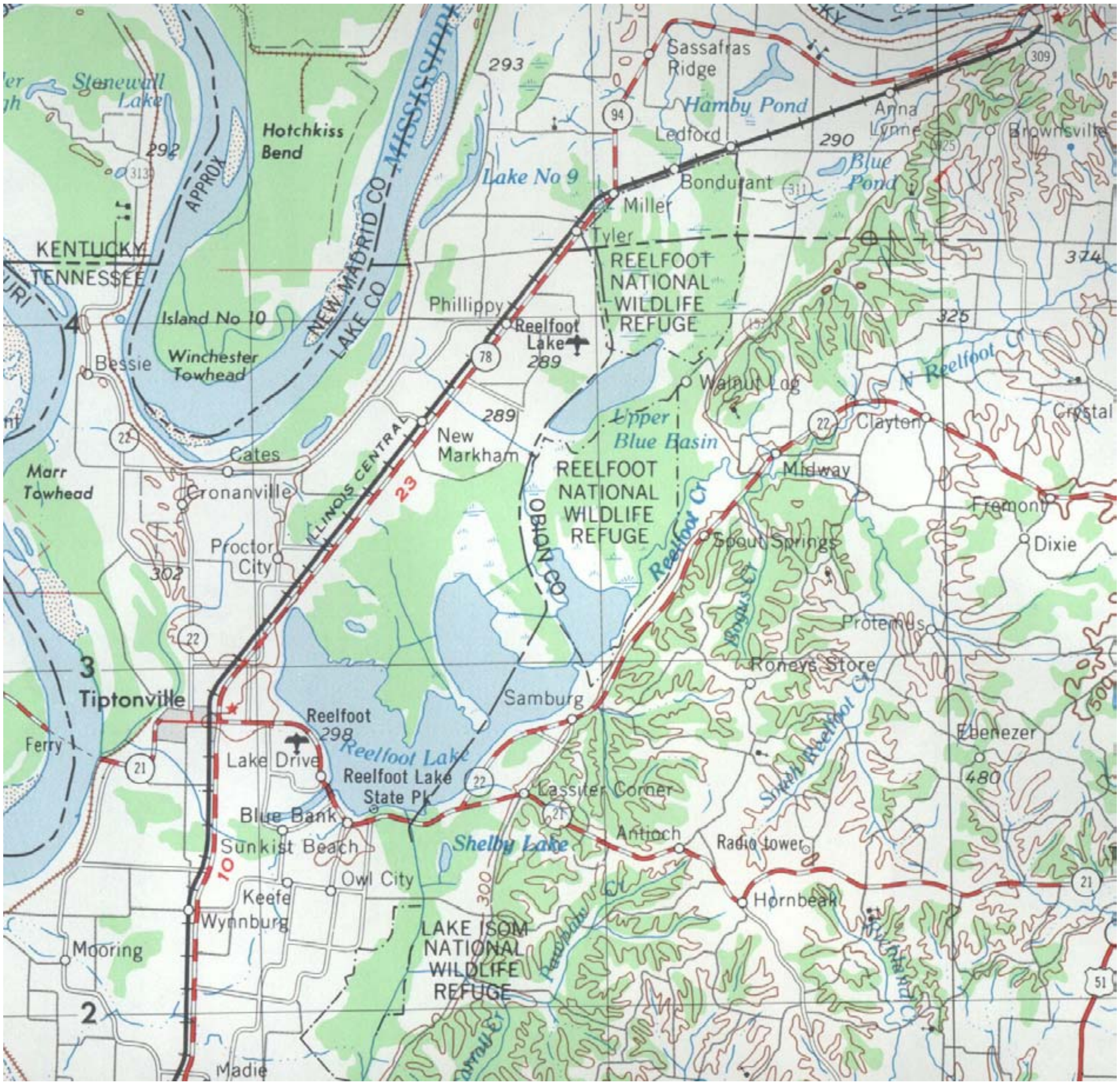
LOCATION: Reelfoot Lake in Lake and Obion Counties

WATERSHED DESCRIPTION: Reelfoot Lake is a natural, depressional wetland that encompasses approximately 25,000 acres of shallow open water and vegetated wetland habitat. Adjacent land use is primarily rural agricultural. Reelfoot Lake is designated as an Outstanding National Resource Water which receives the highest level of protection under regulation. It is also designated as a Class I - Scenic-Recreational Area and a Wildlife Management Area administered by the Tennessee Wildlife Resources Agency.

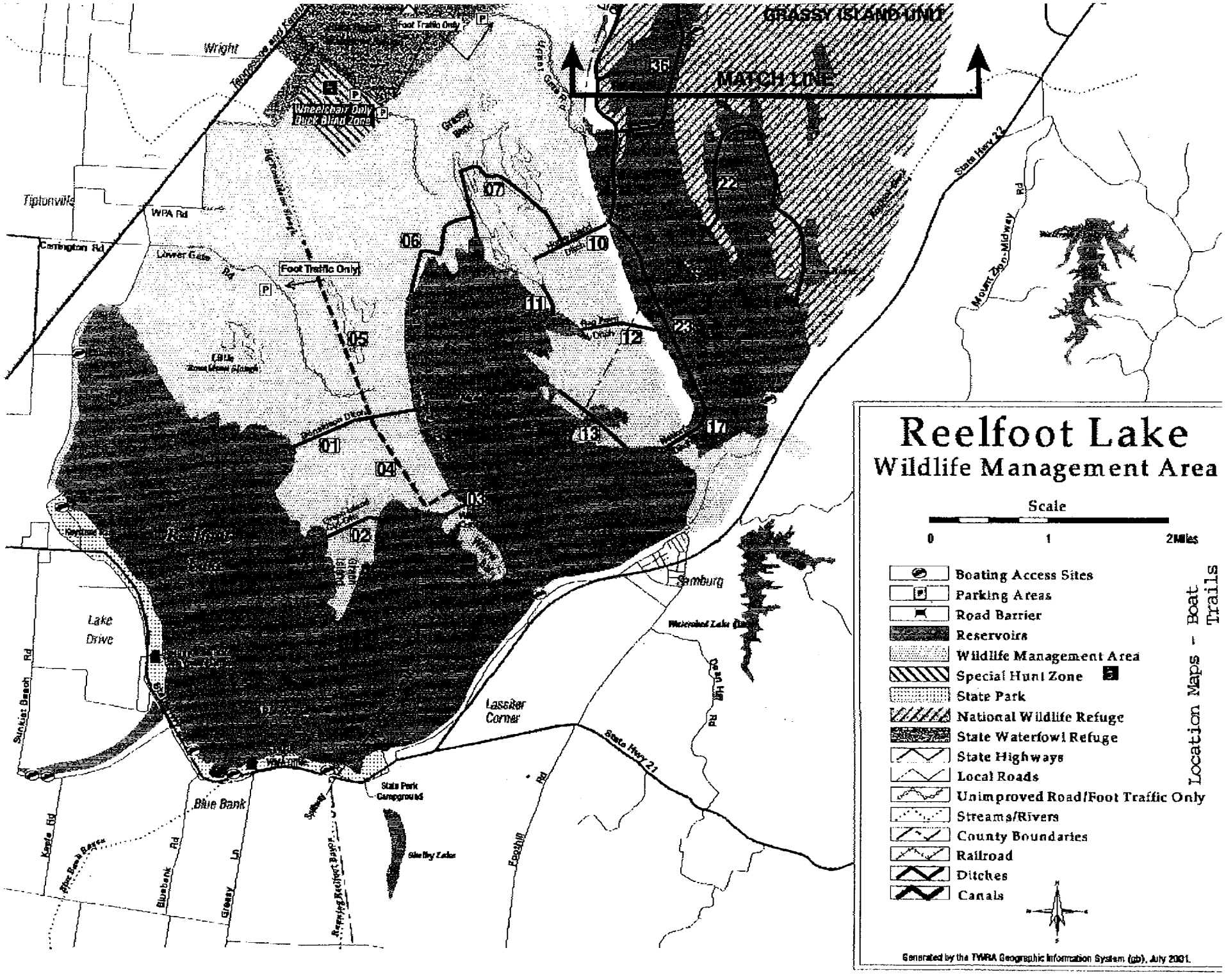
PROJECT DESCRIPTION: The proposed work involves the maintenance dredging of boating channels in Reelfoot Lake. Approximately 45.5 miles of work is proposed. The typical channel dimension would be approximately 10 feet wide by 3 to 6 feet deep. In another section of channel for about 1.1 miles the width would be about 30 feet and depth of 6 feet. About 2.4 miles of channel would be 20 feet wide. Dredging would be done using an amphibious track-hoe to remove woody debris and a hydraulic dredge to excavate sediment. The slurry would be sprayed out over the surrounding area away from the channel. This project also requires a permit pursuant to T.C.A.§69-1-1, for construction of a structure or to engage in an activity on or in Reelfoot Lake that may have the effect of impairing or obstructing navigability. The Division has tentatively determined to issue the navigation permit.

PERMIT COORDINATOR: Robby Baker

USGS TOPOGRAPHIC QUADRANGLES: 419 NW, TIPTONVILLE; 419 NE SAMBURG; 419 SW, RIDGELY; 419 SE, HORNBEAK.



Hotchkiss Bend
MISSISSIPPI
NEW MADRID CO
LAKE CO
KENTUCKY
TENNESSEE
Island No 10
Winchester Towhead
Bessie
Marr Towhead
Cates
Cronanville
Proctor City
Tiptonville
Ferry
Mooring
Wynnburg
Keefe
Owl City
Sunkist Beach
Blue Bank
Lake Drive
Reelfoot Lake State Pk
Reelfoot Lake
Madie
ILLINOIS CENTRAL
New Markham
Phillippy
Reelfoot Lake
Tyler
Miller
Lake No 9
Sassafras Ridge
Hamby Pond
Ledford
Bondurant
Anna Lynne
Brownsville
Blue Pond
REELFOOT NATIONAL WILDLIFE REFUGE
OBION CO
Upper Blue Basin
Walnut Log
Clayton
Midway
Fremont
Dixie
Spout Springs
Reelfoot Cr
N Reelfoot Cr
Crystal
Protemus
Roneys Store
Samburg
Ebenezer
Lassiter Corner
Antioch
Radio tower
Shelby Lake
Hornbeak
LAKE ISOM NATIONAL WILDLIFE REFUGE


GRASSY ISLAND UNIT
MATCH LINE
Reelfoot Lake
Wildlife Management Area
Scale
0
1
2Miles
Boating Access Sites
Parking Areas
Road Barrier
Reservoirs
Wildlife Management Area
Special Hunt Zone
State Park
National Wildlife Refuge
State Waterfowl Refuge
State Highways
Local Roads
Unimproved Road/Foot Traffic Only
Streams/Rivers
County Boundaries
Railroad
Ditches
Canals
Location Maps - Boat Trails
Generated by the TWRA Geographic Information System (gis), July 2001.
Wright
Tiptonville
Lake Drive
Blue Bank
Samburg
Lassiter Corner
State Park Campground
Foot Traffic Only
Wheelchair Only Duck Blind Zone
01
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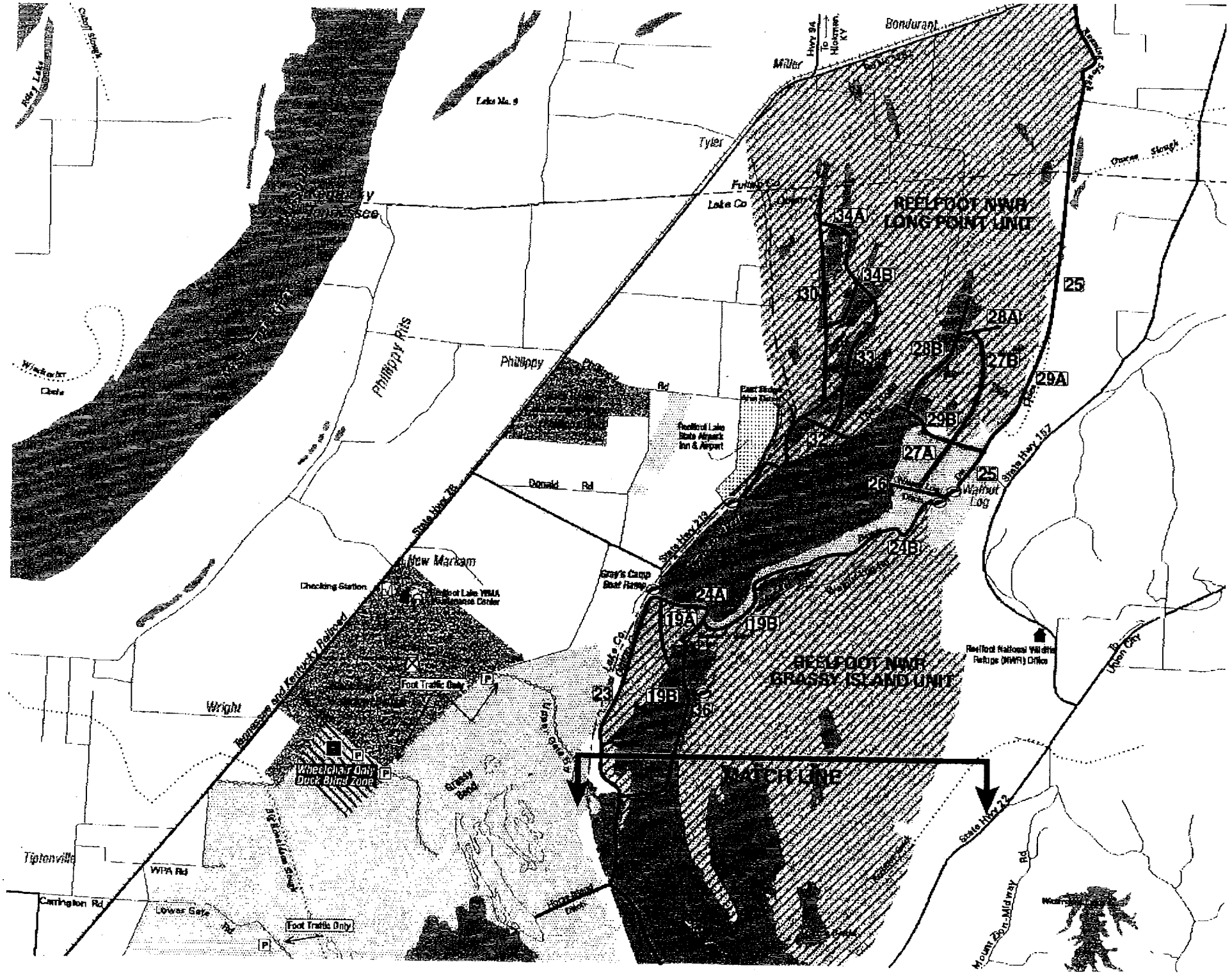
36


REELFOOT NWR
LONG POINT UNIT
REELFOOT NWR
GRASSY ISLAND UNIT
MATCH LINE
Bondurant
Miller
Tyler
Lake Co
Phillippy
Phillippy Rds
New Markam
Wright
Tiptonville
Walnut Log
Reelfoot Lake State Airport Inn & Airport
Reelfoot National Wildlife Refuge (NWR) Office
Checking Station
Gray's Camp Boat Ramp
Foot Traffic Only
Wheelchair Only Duck Blind Zone
Tennessee and Kentucky Railroad
State Hwy 78
State Hwy 213
State Hwy 157
State Hwy 22
Donald Rd
WPA Rd
Carrington Rd
Lower Gate Rd
Mount Zion-Midway Rd
Union City
Hwy 94 To Hickman, KY
34A
34B
30
33
28A
28B
27B
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19B
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Figure 1. Typical Cross-section of Jet Spray Work and Disposal Area

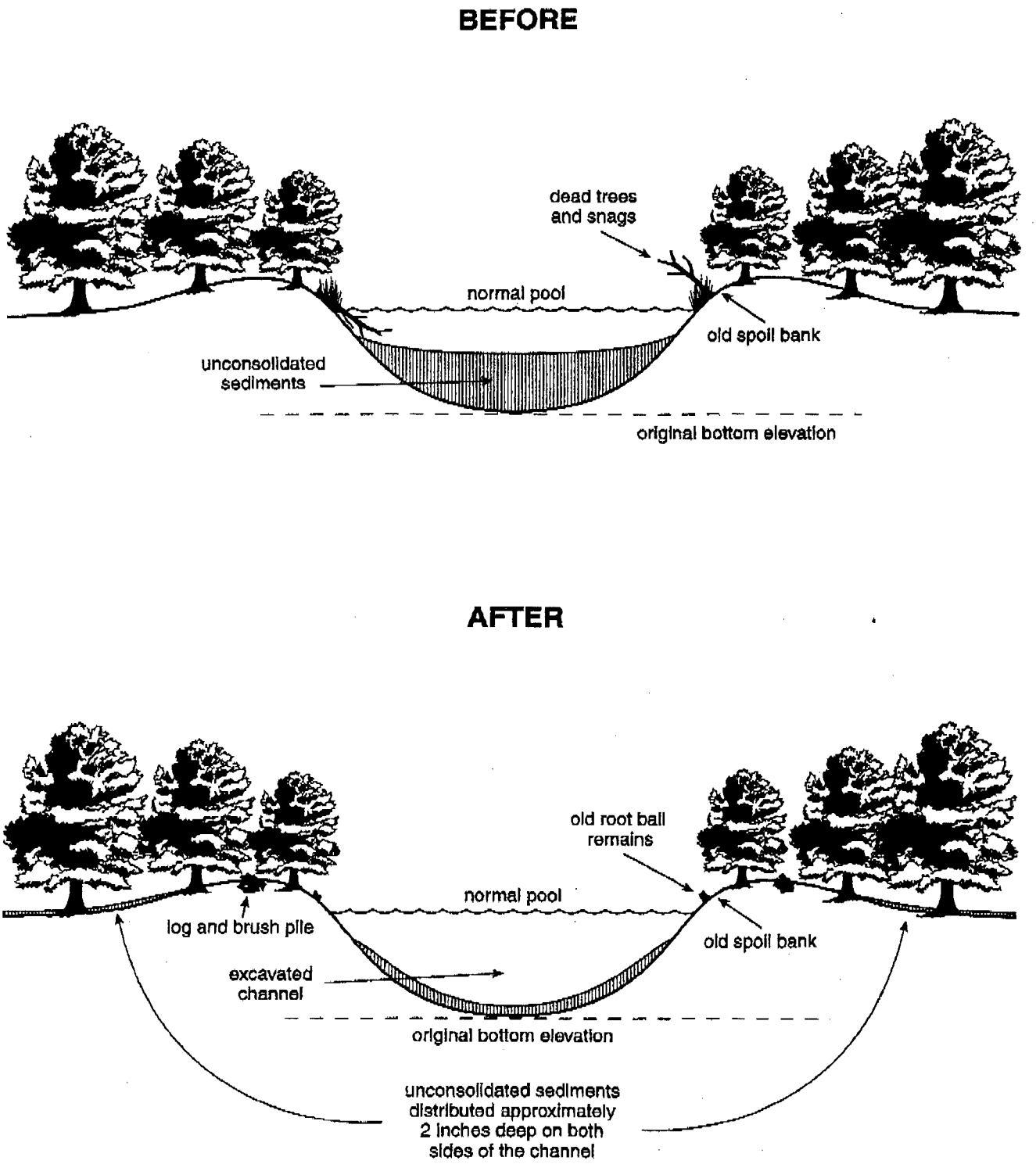
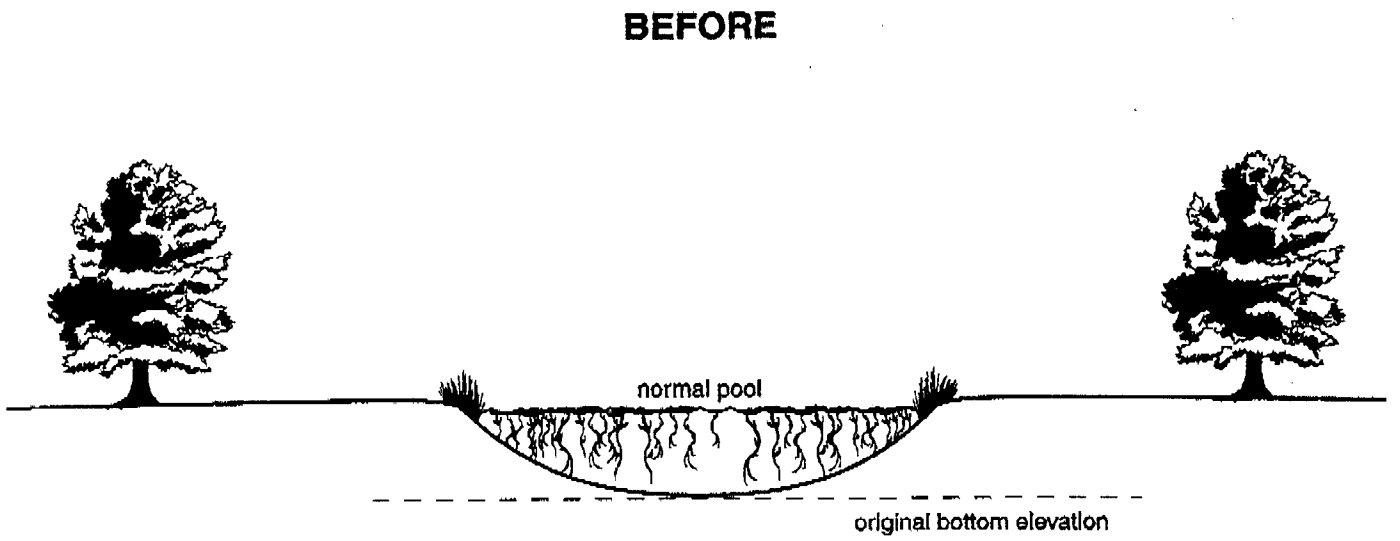


Figure 2. Typical Cross-section of Vegetation-only Removal by Jet-Spray



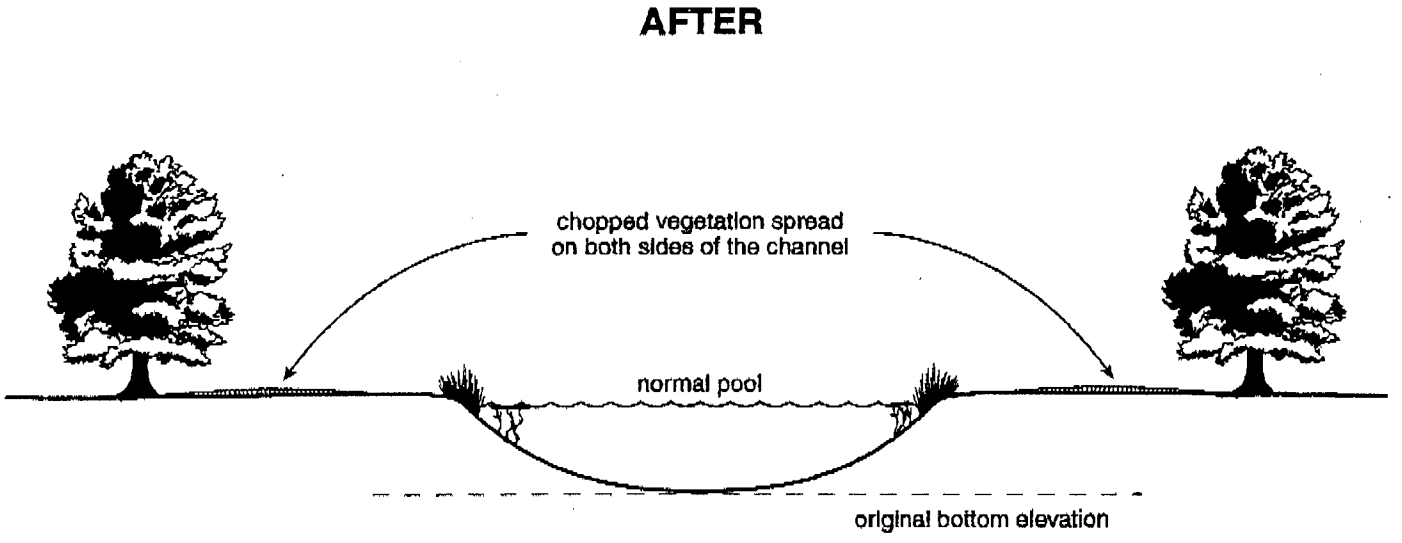
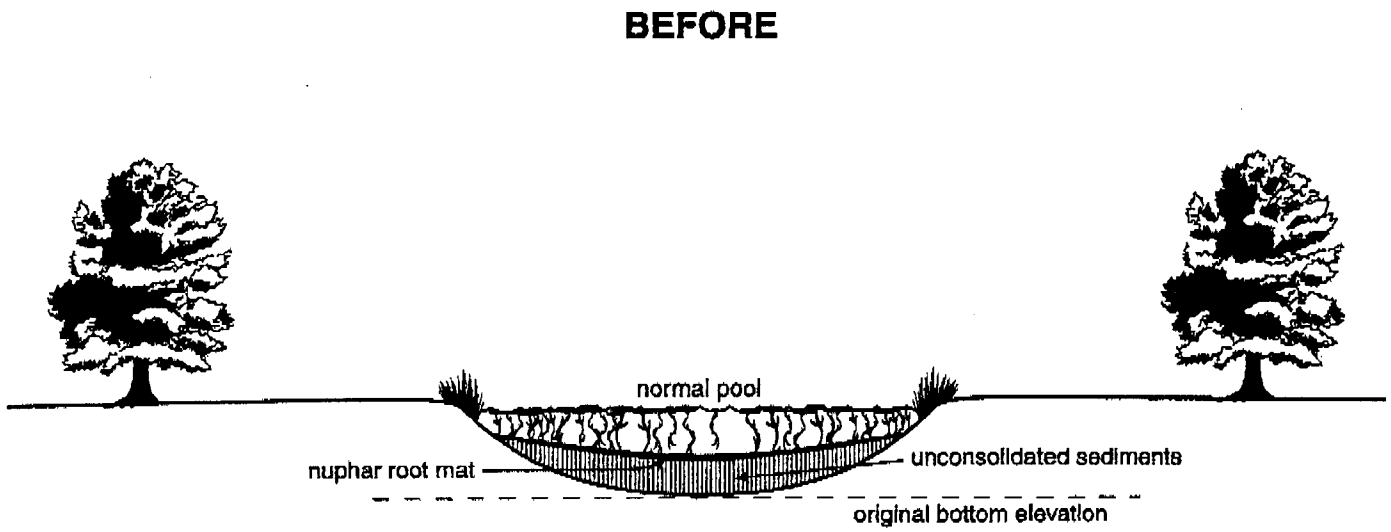


Figure 3. Typical Cross-section of Vegetation Removal and Sediment Redistribution by Jet-Spray



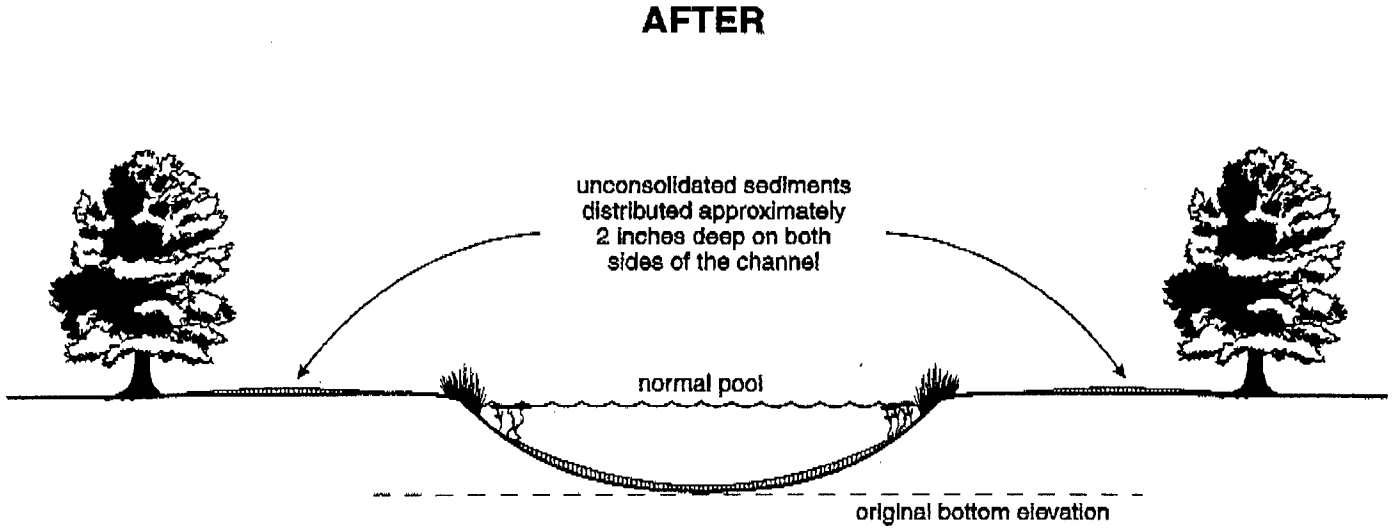


Figure 4 .Typical Aerial View of Sediment Distribution by Jet-Spray